

What is claimed is:

1. An aqueous composition useful for maintaining a carpet's desired appearance and smell, said composition comprising:
 - (a) at least one antimicrobial compound; and
 - (b) at least one enzyme inhibitor.
2. The composition of Claim 1, wherein said antimicrobial compound is from about 0.01% to about 10% by weight of said composition; and said enzyme inhibitor is from about 0.05% to about 10% by weight of said composition.
3. The composition of Claim 1, wherein said antimicrobial compound is selected from the group consisting of silver zirconium phosphate, zinc oxide, polyhexamethylene biguanide, and 2-bromo-2-nitro-1,3-propanedial.
4. The composition of Claim 1, wherein said antimicrobial compound is a formaldehyde-donor antimicrobial compound.
5. The composition of Claim 4, wherein said formaldehyde-donor antimicrobial agent is selected from the group consisting of N,N'-dimethylol 5,5-dimethyl hydantoin, N-methylol 5,5-dimethyl hydantoin, imidazolidinyl urea, cationic quaternary ammonium salt, sodium sorbate, potassium sorbate, sorbic acid, and grapefruit seed extract.
6. The composition of Claim 5, wherein said formaldehyde-donor antimicrobial agent is N-methylol 5,5-dimethyl hydantoin.
7. The composition of Claim 1, wherein said enzyme inhibitor is selected from the group consisting of organic and inorganic salts of zinc, copper, zirconium, aluminum, silver, and tin; aldehydes; quaternary ammonium compounds; salts containing ions selected from the group consisting of silver, zinc, and copper; complexes containing ions selected from the group consisting of silver, zinc, and copper; boric acids and borates; salt of citric acid; sorbic acid and its salt; bromo-nitro compounds; and phosphoamide compounds.

8. The composition of Claim 7, wherein said enzyme inhibitor is a bromo-nitro compound.

5 9. The compound of Claim 8, wherein said bromo-nitro compound is 2-bromo-2-nitro-1,3-propanedial.

10 10. The composition of Claim 1, further comprising an odor-absorbing compound selected from the group consisting of activated carbon, zeolites, zinc oxide, cyclodextrin, and zinc ricinoleate.

11. The composition of Claim 10, wherein said odor-absorbing compound is zinc ricinoleate.

15 12. The composition of Claim 10, wherein said odor-absorbing compound is from about 0% to about 10% by weight of said composition.

20 13. The composition of Claim 1, further comprising an aldehyde-containing aroma compound selected from the group consisting of citral, cinnamic aldehyde, hexyl cinnamic aldehyde, benzyl aldehyde, benzyl salicylate, amyl cinnamic aldehyde, and vanillin.

25 14. The composition of Claim 13, wherein said aroma compound is hexyl cinnamic aldehyde.

15. The composition of Claim 13, wherein said aroma compound is from about 0% to about 7% by weight of said composition.

30 16. The composition of Claim 1, further comprising (c) an odor-absorbing compound selected from the group consisting of activated carbon, zeolites, zinc oxide, cyclodextrin, and zinc ricinoleate, and (d) an aldehyde-containing aroma compound selected from the group consisting of citral, cinnamic aldehyde, hexyl cinnamic aldehyde, benzyl aldehyde, benzyl salicylate, amyl cinnamic aldehyde, and vanillin.

17. The composition of Claim 1, wherein said composition is incorporated within urea formaldehyde powder having a moisture content of about 30%, until said powder is damp.

5 18. A method for removing contaminants from carpet, said method comprising:
(a) saturating the carpet at the location of a contaminant with an aqueous cleaning composition comprising (i) at least one antimicrobial compound and (ii) at least one enzyme inhibitor; and
10 (b) blotting the contaminant with an absorbent material.

19. The method of Claim 18, wherein said antimicrobial compound is from about 0.01% to about 10% by weight of said composition; and said enzyme inhibitor is from about 0.05% to about 10% by weight of said composition.

15 20. The method of Claim 18, wherein said chemical composition further includes an aldehyde-containing aroma compound selected from the group consisting of citral, cinnamic aldehyde, hexyl cinnamic aldehyde, benzyl aldehyde, benzyl salicylate, amyl cinnamic aldehyde, and vanillin.

20 21. The method of Claim 20, wherein said aroma compound is from about 0% to about 7% by weight of said chemical composition.

25 22. The method of Claim 18, wherein said chemical composition further includes an odor-absorbing compound selected from the group consisting of activated carbon, zeolites, zinc oxide, cyclodextrin, and zinc ricinoleate.

23. The method of Claim 22, wherein said odor-absorbing compound is from about 0% to about 10% by weight of said chemical composition.

30 24. A method for maintaining a carpet's desired appearance and smell, said method comprising:

- (a) applying a chemical composition to the carpet, said composition comprising (i) at least one antimicrobial compound and (ii) at least one enzyme inhibitor;
- (b) vacuuming the carpet to remove most of said chemical composition; and
- (c) repeating steps (a) and (b) on a periodic frequency.

25. The method of Claim 24, wherein said chemical composition further includes an aldehyde-containing aroma compound selected from the group consisting of citral, cinnamic aldehyde, hexyl cinnamic aldehyde, benzyl aldehyde, benzyl salicylate, amyl cinnamic aldehyde, and vanillin.

26. The method of Claim 24, wherein said chemical composition further includes an odor-absorbing compound selected from the group consisting of activated carbon, zeolites, zinc oxide, cyclodextrin, and zinc ricinoleate.

27. The method of Claim 24, wherein said chemical composition further comprises a urea formaldehyde powder that is combined with said antimicrobial agent and said enzyme inhibitor, whereby said antimicrobial agent and said enzyme inhibitor are absorbed into said urea formaldehyde powder.

28. The method of Claim 27, wherein said antimicrobial compound is from about 0.01% to about 10% by weight of said chemical composition; said enzyme inhibitor is from about 0.05% to about 10% by weight of said chemical composition; water is from about 10% to about 50% by weight of said chemical composition; and the percentage of said urea formaldehyde powder is such that the total equals 100%.

29. The method of Claim 27, wherein said chemical composition further includes an aldehyde-containing aroma compound selected from the group consisting of citral, cinnamic aldehyde, hexyl cinnamic aldehyde, benzyl aldehyde, benzyl salicylate, amyl cinnamic aldehyde, and vanillin.

30. The method of Claim 27, wherein said chemical composition further includes an odor-absorbing compound selected from the group consisting of activated carbon, zeolites, zinc oxide, cyclodextrin, and zinc ricinoleate.
- 5 31. A method for removing contaminants from carpet and maintaining the carpet's desired appearance and smell, said method comprising:
- (a) applying an aqueous cleaning composition comprising (i) at least one antimicrobial compound and (ii) at least one enzyme inhibitor; and
 - (b) removing most of said cleaning composition using an extraction machine.
- 10 32. The method of Claim 31, wherein said antimicrobial compound is from about 0.01% to about 10% by weight of said composition; and said enzyme inhibitor is from about 0.05% to about 10% by weight of said composition.
- 15 33. The method of Claim 31, wherein said chemical composition further includes an aldehyde-containing aroma compound selected from the group consisting of citral, cinnamic aldehyde, hexyl cinnamic aldehyde, benzyl aldehyde, benzyl salicylate, amyl cinnamic aldehyde, and vanillin.
- 20 34. The method of Claim 33, wherein said aroma compound is from about 0% to about 7% by weight of said chemical composition.
- 25 35. The method of Claim 31, wherein said chemical composition further includes an odor-absorbing compound selected from the group consisting of activated carbon, zeolites, zinc oxide, cyclodextrin, and zinc ricinoleate.
- 30 36. The method of Claim 35, wherein said odor-absorbing compound is from about 0% to about 10% by weight of said chemical composition.
37. A carpet comprising a pile upper surface and at least one backing surface attached to said pile upper surface, said pile upper surface comprising yarns that are at least partially coated with an antimicrobial compound and an enzyme inhibitor.

38. The carpet of Claim 37, wherein said carpet further comprises a liquid barrier layer between said pile upper surface and said backing surface.

5 39. The carpet of Claim 37, wherein said antimicrobial compound is selected from the group consisting of silver zirconium phosphate, zinc oxide, polyhexamethylene biguanide, N,N'-dimethylol-5,5-dimethyl hydantoin, N-methylol-5,5-dimethyl hydantoin, imidazolidinyl urea, cationic quaternary ammonium salt, sodium sorbate, potassium sorbate, sorbic acid, and grapefruit seed extract.

10 40. The carpet of Claim 39, wherein said antimicrobial compound is N-methylol-5,5-dimethyl hydantoin.

15 41. The carpet of Claim 37, wherein said enzyme inhibitor is selected from the group consisting of organic and inorganic salts of zinc, copper, zirconium, aluminum, silver, and tin; aldehydes; quaternary ammonium compounds; salts containing ions selected from the group consisting of silver, zinc, and copper; complexes containing ions selected from the group consisting of silver, zinc, and copper; boric acids and borates; salt of citric acid; sorbic acid and its salt; bromo-nitro compounds; and phosphoamide compounds.

20 42. The carpet of Claim 41, wherein said enzyme inhibitor is a bromo-nitro compound.

25 43. A method of treating a carpet to maintaining the appearance and smell of a carpet, said method comprising the steps of:

- (a) applying an aqueous cleaning composition comprising (i) at least one antimicrobial compound and (ii) at least one enzyme inhibitor; and
- (b) drying said carpet.

30 44. The method of Claim 43, wherein said drying occurs at a temperature at no greater than 370 °F.